

UNITED STATES PATENT AND TRADEMARK OFFICE

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NOTICE OF ALLOWANCE AND FEE(S) DUE

22850

7590

06/09/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
PARK, CHAN S

ART UNIT PAPER NUMBER

DATE MAILED: 06/09/2004

2622

4

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/668,161	09/25/2000	Tomonori Tanaka	197632US2	1730	

TITLE OF INVENTION: APPARATUS, METHOD AND COMPUTER READABLE RECORDING MEDIUM FOR PROCESSING IMAGE INFORMATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE			DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	09/09/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

22850 7590 06/09/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)	
(Signature)	,
(Date)	·

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09/668.161	09/25/2000	Tomonori Tanaka	197632US2	1730

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	SMALL ENTITY	ISSUE F	EE PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1330	0	\$0	\$1330	09/09/2004
EXAMINER PARK, CHAN S		ART UNIT 2622		CLASS-SUBCLASS	٦	
				358-001160	_	
Address form PTO/SB/1: "Fee Address" indicati	ence address (or Change of	Correspondence	names of agents Of firm (hav agent) an	nting on the patent front page, up to 3 registered patent R, alternatively, (2) the name ing as a member a registered d the names of up to 2 registor or agents. If no name is list inted.	attorneys or 1 of a single l attorney or 2 stered patent	
PLEASE NOTE: Unless	an assignee is identified be	low no accionae d				
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other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



1940 DUKE STREET ALEXANDRIA, VA 22314

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

PAPER NUMBER

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/668,161 09/25/2000 Tomonori Tanaka 197632US2 1730 22850 7590 06/09/2004 **EXAMINER** OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, PARK, CHAN S

> 2622 DATE MAILED: 06/09/2004

ART UNIT

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 744 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 744 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
•	09/668,161	TANAKA, TOMONORI
Notice of Allowability	Examiner	Art Unit
	CHAN S PARK	2622
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R	(OR REMAINS) CLOSED in this applied or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. THIS
1. This communication is responsive to 4/22/04.	•	
2. X The allowed claim(s) is/are 1-15,18-20,39-50,53,54,56-66	and 69-90.	
3. \boxtimes The drawings filed on <u>23 October 2000</u> are accepted by th	e Examiner.	
 4. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM 	e been received. e been received in Application No cuments have been received in this of this communication to file a reply	national stage application from the
 THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submined in the submined	es reason(s) why the oath or declara st be submitted. son's Patent Drawing Review (PTO-	ation is deficient.
1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the sheet.	s Amendment / Comment or in the C	ngs in the front (not the back) of
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL r	must be submitted. Note the
		·
Attachment(s)		
1. Notice of References Cited (PTO-892)		Patent Application (PTO-152)
 Notice of Draftperson's Patent Drawing Review (PTO-948) Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 2/4.	<u>_</u>	te <u> </u>
of Biological Material	9. ☐ Other E SUPERVIS	DWARD COLES ORY PATENT EXAMINER OLOGY CENTER 2600

Art Unit: 2622

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Surinder Sachar, reg. No. 34,423 on May 20, 2004 and May 24, 2004.

2. The application has been amended as follows:

17 CSP

regarding the specification, page 7, line 18, "...an output device..." has been amended:

--...an output device 103...-regarding the specification, page 10, line 8, "...in a image data output

--...in <u>an</u> image data output operation...-regarding the specification, page 13, line 8, "...the IPY 312..." has been

amended:

--...IP<u>U</u> 312...--

operation..." has been amended:

regarding the specification, page 39, lines 21-22 and page 40, line 7 &12, "arbiter 705" has been amended:

--...arbiter 1201...--

Art Unit: 2622

3. Claims 16, 17, 21-38, 51, 52, 55, 67, and 68 are cancelled.

Authorization for this cancellation of non-elected claims was given in a telephone interview with Mr. Surinder Sachar, reg. No. 34,423 on May 20, 2004 and May 24, 2004.

Allowable Subject Matter

- 4. Claims 1-15, 18-20, 39-50, 53, 54, 56-66, and 69-90 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

The prior art of record do not teach or suggest the limitation for an image processing apparatus comprising:

a difference data amount calculation device subtracting the amount of the data acquired by the internal output data amount acquisition device from the amount of the data acquired by the external data amount acquisition device, and calculating first difference data amount by the subtraction;

a memory access control device practicing the inputting and outputting of the image data in the primary memory device by comparing four different value wherein following condition is given:

4th value < 1st value < 2nd value < 3rd value; and

the memory access control device further practicing the outputting an error signal when one of following conditions is given:

difference data amount $\geq 3^{rd}$ value or difference data amount $\leq 4^{th}$ value.

Application/Control Number: 09/668,161

Art Unit: 2622

6. Some of the prior art related to the image processing apparatus are cited and detailed below which fail to teach the limitation of independent claim 1 as stated above. The most relevant prior art Takayama et al. (U.S. Patent No. 6,621,592) teaches an image processing apparatus comprising:

an external input data amount acquisition device acquiring the amount of the image data input to a hard disk;

an internal output data amount acquisition device acquiring the amount of the image data input to a RAM; and

a memory access control device practicing the inputting and outputting of the image data in the hard disk by controlling a data transfer rate between the hard disk and the RAM based on the amount of data stored in the hard disk.

However; Takayama et al. does not teach the applicant's claimed four values for comparing according to the claimed conditions and outputting the error signal.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 09/668,161

Art Unit: 2622

Contact Information

Page 5

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S PARK whose telephone number is (703) 305-2448. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

csp May 25, 2004 Chan S. Park Examiner Art Unit 2622

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2500

	,	•	Appliount(3)	
Interview Summary	09/668,161		TANAKA, TOMO	NORI
	Examiner		Art Unit	
	CHAN S PARK		2622	
All participants (applicant, applicant's representative, PTO	personnel):			
(1) <u>CHAN S PARK</u> .	(3)			
(2) <u>Surinder Sachar</u> .	(4)			
Date of Interview: <u>5/20/04 & 5/24/04</u> .				
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2	2)∏ applicant's	representative]	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊡ No.			
Claim(s) discussed: <u>1-90</u> .				
Identification of prior art discussed:				
Agreement with respect to the claims f)⊠ was reached. g)∐ was not rea	ched. h)⊡ N	/A.	
Substance of Interview including description of the general reached, or any other comments: <u>The cancellation of non-eauthorized</u> . An agreement was reached regarding the Example 1.	elected claims 10	6-19, 21-38, 51	1, 52, 55, 67, and	1 68 was
(A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no callowable is available, a summary thereof must be attached	opy of the amen	e examiner agr dments that w	eed would rende ould render the c	r the claims claims
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR FORM, WHICHEVER IS LATER, TO FILE A STATEMENT Summary of Record of Interview requirements on reverse si	last Office actio THE MAILING DOT THE SUBST	n has already DATE OF THIS ANCE OF THI	been filed, APPL S INTERVIEW SU	ICANT IS JMMARY
·				
·				
Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.		rominor's sign	ature, if required	
recomment to a signed Office action.	⊏X	annier s signa	mure, ii required	



Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
 - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.